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A Study of the Values of Kindergarten Expriences

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A STUDY OF THE VALUES OF KINDERGARTEN EXPERIENCES

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Dohn A. Miller

FOR THE GRADUATE FACULTY

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION AND STATEMENT OF THE PURPOSE

I. INTRODUCTION

Is it worthwhile to send children to kindergarten? At the end of the nineteenth century there were about three hundred kindergartens in the United States (11:19). In 1955 the five-year-old population was well over 3,500,000, and of this number more than 1,700,000 were enrolled in kindergarten. This represents approximately 45 per cent of the total five-year-old population (9:27-28). Another study made in 1953-1954 showed that 84 per cent of the cities over 100,000 and 80 per cent of the cities in the Western states operated kindergartens (6:932). Interest seems to indicate a growing faith in the kindergarten.

II. PURPOSE

This paper will attempt to see if this faith is justified by benefits kindergarten children derive.

Unfortunately, research in this area is difficult to defend because it lacks objectivity. Asking "What are the values of kindergarten?" is like asking "What value was your family in your early years?" The values seem obvious, but try to <u>prove</u> them. For example, if one says the family protects the child from being hurt by setting down rules for

him to obey, there is always someone nearby to point out that they were impeding the child's growth towards self-sufficiency and independence. Thus, the family is rated in terms of the particular philosophy of the one doing the rating. It is difficult to decide who will do the rating, and by what standards. The only clearly objective statement one can make is that even though the family is a pervading influence in the child's life, one cannot isolate its influence from those of other persons and things which modify the child's behavior. Study usually shifts from evaluating the family to describing it. Our question changes from "Should the family have done this?" to "What happened when they did this?"

The analogy of the family was used to point out the problems one faces attempting to evaluate kindergartens. Just as there are good and bad families, so there are good and bad kindergartens. Judgment depends on many variables, including the kind of group, the kind of teacher, the kind of parents, and the kind of philosophy.

The effects of education appear to be in proportion to the quality of the program. Quality kindergarten programs favorably influence later academic achievement. Not all evidence is uncontested, even so the evidence is significant and impressive (5:19).

Chapter II will review the literature found in the library at Central Washington State College relating to

kindergarten training and the effects it has on the child. The material will include what educators say about kindergartens, and the relation of kindergarten experience to social development, promotion in school, intelligence, and achievement in content subjects.

CHAPTER II

REVIEW OF LITERATURE

I. WHAT EDUCATORS SAY ABOUT KINDERGARTENS

Many experts who have worked with and understood the psychology of children have stressed the values of kindergarten experiences. Hazel M. Lambert, author of Teaching the Kindergarten Child, combines her own philosophy with that of John Dewey by suggesting that education is not merely "pouring" learning into the child but is more a "reconstruction" of experiences. The child learns and adapts what he learns to the solution of a new problem. "Because there are not formal requirements . . ." Miss Lambert says, "the kindergarten can give the child maximum freedom to explore and grow" (11:28-29).

Dr. Arnold Gesell, well-known author and one of the country's ten leading authorities on child development, says of kindergartens (1):

> . . . we must try to create equal opportunities for full development in early years of life. No years are more important. They come first, therefore they influence all that follow. . . . A well reared child needs a good preschool education. . . . Most of the education will be given in the home. Democracy begins there. But society can help the home to provide a better education for the preschool child. . . . The front door of the kindergarten opens into the homes of the people. . . . America needs kindergartens.

Roma Gans, Celia Burns Stendler, and Millie Almy, in analyzing the values of preschool education, assert:

> Specialists in the fields of health, welfare, sociology, anthropology, law, and education have shown that the personality of the child is developed in the early years of life. What happens to the young child, in the home, in the neighborhood, and in the community, will largely shape his chances for a wholesome and satisfying life. Consequently, what he experiences in his first years in school has more influence on him than any later education. . . . Children have as their right, group experience in good nursery schools, kindergartens, and primary grades. This experience should . . . be available for all from the age of five through eight (7:44-45).

II. RELATION OF KINDERGARTEN EXPERIENCE TO SOCIAL ADJUSTMENT

It is important that children learn to adjust happily at an early age to group living, for their adult lives will be spent in group situations--schools, factories, offices, families, and community organizations. The ability to work coöperatively with other people is a basic skill of democratic living. "But," one asks, "why spend taxpayers' money for kindergartens just to teach children social skills they could learn at home?"

The answer lies partially in the fact that our democratic society functions on the ideals of equality--all children should have equal opportunities for the best possible growth. Here the role of the school becomes crucial. School children are being recruited from "stratas of life where the odds

against family life make the struggle with usual problems of living one of intense difficulty and often despair" (2:33).

The Kindergarten Primary Department of the National Education Association, in analyzing the importance of kindergartens, made some important observations about America today: (1) mothers with large families or with jobs outside of the home don't have the time to give their small children the attention and guidance they require; (2) children in rural areas, and often in urban areas, do not have the companionship of others their age; (3) parents do not always have the training (or time or money) to provide guidance and the variety of experiences offered by a good kindergarten; and (4) gifted and retarded children need encouragement and special attention. Most parents, having limited experience in observing the differences among children, do not recognize the unique needs of their own children (12).

Yes, kindergarten is a logical place for the child to develop habits of acceptable behavior. Here the curriculum is broad and there are no pressures of formal academic learning.

Goetch aptly analyzes the social aspects of kindergarten (8:16):

> The real kindergarten--the kindergarten which fosters the self activity, the spontaneity and play impulse of the child, that promotes his individuality and at the same time inculcates a regard for law and respect for

> the rights and privileges of others, that arouses in the child a wholesome interest in the life about him and that quickens his senses--will exert, I think, a lasting influence; one that will tell through his period of mental development. Children from such a kindergarten enter upon the first grade work with good motor control, with habits of industry, order, courtesy, obedience, and self control, with larger language powers, with minds awake and with joy in their conscious power of self-expression.

If one has faith in the judgment and opinions of primary teachers, much research evidence can be cited to show that kindergarten experiences do contribute favorably to the child's social development.

In a number of studies, teachers were questioned as to the difference between kindergarteners and non-kindergarteners in the area of social adjustment. Most studies in general agreed that the kindergarten group seemed to mix more socially, communicate more freely, work more in groups, and become more ascendant than submissive (5:15-16; 9:26; 8:14; 6:394). They were judged to be more secure, more adaptable, and more advanced in accepting social responsibility (11:28; 9:26). Additional advantages were recorded in the areas of neatness, politeness, and love of work (8:14).

This section has made no attempt to describe a "good program in social adjustment," for it is conceivable that an "ideal" program on paper would not necessarily approach the "truly ideal" situation. If one is interested in such descriptions, there are many good psychology books written on

the subject. And almost every kindergarten methods book has chapters on social adjustment. The point this section wishes to emphasize is that research studies demonstrate the superiority (as rated by teachers) of kindergarten trained children over non-kindergarteners in the area of social adjustment.

If one is seeking more tangible evidence showing the advantages of kindergarten training, then the next section, dealing with the promotion of kindergarteners and non-kindergarteners, will reveal some interesting studies.

III. RELATION OF KINDERGARTEN EXPERIENCE TO PROMOTION IN SCHOOL

Considering the progress of pupils in the elementary grades is most important. Pupils who fail to be promoted or fail to make normal progress are usually obliged to repeat work already covered. They become over-age or older than they should be for their grade. If failures are too frequent, elimination from school is likely to follow. Failure to make normal progress means an increase in the cost of instruction. Experience and observation show that repeated failure of pupils to make progress in their school work results in loss of self-esteem and lack of self-confidence and affects their attitude in subsequent contact with problems of after school life.

The following four studies deal with failures and promotions of kindergarten children. J. K. East (4:52-53), superintendent of schools in Blacksburg, South Carolina, believed that abilities of children were being wasted by postponing school entrance to the age of six. In 1950, therefore, he set up the first public school kindergarten in that state. Statistical evidence verified his belief; the results of the work in kindergarten were gratifying from every standpoint. Mr. East reported (4:52-53):

> In every attempt to evaluate the kindergarten and non-kindergarten pupils, we have found the kindergarten pupils to excel. . . . Although kindergartens do cost money, when measured in terms of the child's growth the experiment is proving a good investment. We operate on the theory that it is cheaper and easier to give the child the right beginning than to have him repeat work in the primary, and sometimes upper, grades because of a bad beginning. We are finding fewer failures among kindergarten children than among non-kindergarteners.

Lorene Teegarden's study (21:82-83) was designed with a little different purpose in mind; she was studying the tendency to reverse and confuse letters. The outcomes of her report, however, were in agreement with findings by East. She found that in middle class and industrial districts included in the study, "kindergarten training distinctly increased the percentage of those who were able to win promotion into the second grade."

A third study, by Goetch (8:32-37), compared 968 pupils who had kindergarten experience with 968 without.

Of the kindergarten pupils 1.7 per cent were underage, 89 per cent normal, and 10 per cent overage. The non-kindergarten group had 3 per cent underage, 78 per cent normal, and 19 per cent overage. In every study the kindergarten group had the advantage: fewer failures, fewer retentions, more accelerations, and more reports of normal progress.

Morrison (12), in the fourth study, compared 2,334 New York children who had kindergarten experience at age five with 1,475 children who had entered first grade at age five and, therefore, had no kindergarten experience. Fifty-six per cent of those with kindergarten experience and 28 per cent of those who entered first grade at five made normal or rapid progress in school. Over a six-year period, 32 per cent of the first grade group and only 12 per cent of the kindergarten group were retarded two or more years.

Morrison also did a further study of progress data on 13,370 New York children, showing that retardation beyond the first grade was much greater for those beginning in grade one than for those who had kindergarten experience.

The same author in another study of 131 New York State school systems which maintained kindergartens and 29 which did not, showed that only 6 per cent of the first grade children failed in those systems maintaining kindergartens while 20 per cent failed to be promoted from first grade in those systems without kindergartens. More than 80 per cent

of the first grade pupils in those systems with kindergartens made normal or accelerated progress as compared to 58 per cent of the first-graders in those systems without kindergartens.

It seems clear from the preceding studies that kindergarten children have fewer failures and retardations than non-kindergarteners and that kindergarteners are more likely to remain in their normal group in their progress through the grades.

Section IV will examine the very controversial issue of intelligence and its relation to kindergarten experience.

TABLE I

SUMMARY OF FAILURES OF PUPILS BY GRADES (8:34)

Grade	Group		Total Cases	Total Failures	Percentages	Half Grades Failed
I		Kg	108	20	9.2	37
I	N	Kg	108	20	18.5	71
II		Kg	136	27	19.8	110
II	N	Kg	136	40	29.4	148
III		Kg	163	26	15.9	145
III	N	Kg	163	46	28.2	235
IV		Kg	192	50	26.04	333
IV	N	Kg	192	57	29.6	328
V		Kg	158	45	28.4	176
V	N	Kg	158	57	36.07	405
VI		Kg	211	54	25.5	234
VI	N	Kg	211	55	26.06	348
Total		Kg	968	212	21.9	1035
Total	N	Kg	968	275	28.4	1535

TABLE II

SUMMARY OF ACCELERATIONS OF PUPILS BY GRADES (8:35)

Grade	Group		Total Cases	Total Accelerates	Percentages	Half Grades Skipped
I		Kg	108	0	0	0
I	N	Kg	108	0	0	0
II		Kg	136	3	2.2	6
II	N	Kg	136	1	.7	1
III		Kg	163	2	1.4	5
III	N	Kg	163	1	.6	1
IV		Kg	192	4	2.08	10
IV	N	Kg	192	7	3.6	22
V		Kg	158	11	6.8	23
V	N	Kg	158	11	6.8	32
VI		Kg	211	17	8.05	44
VI	N	Kg	211	22	10.42	58
Total		Kg	968	37	3.9	88
Total	N	Kg	968	42	4.3	104

TABLE III

SUMMARY OF THE NUMBER OF PUPILS RETAINED BY GRADE, BUT IN WHICH THEY HAVE NOT FAILED (8:36)

Grade	Group	Total Cases	Total Retention	Percentages	Half Grades Retained
I	Kg	108	1	.9	4
I	N Kg	108	6	5.5	24
II	Kg	136	7	5.14	19
II	N Kg	136	9	6.6	27
III	Kg	163	4	2.5	13
III	N Kg	163	7	4.28	16
IV	Kg	192	11	5.7	41
IV	N Kg	192	13	6.7	61
V	Kg	158	13	8.2	46
V	N Kg	158	10	6.3	37
VI	Kg	211	9	4.26	24
VI	N Kg	211	4	1.89	16
Total	Kg	968	45	4.6	147
Total	N Kg	968	49	5.06	181

TABLE IV

SUMMARY OF NORMAL PROGRESS OF PUPILS BY GRADES (8:36)

Grade	Group	Total Cases	Normal Progress Cases	Percentages
I	Kg	108	97	89.81
I	N Kg	108	82	75.92
II	Kg	136	101	74.92
II	N Kg	136	88	64.7
III	Kg	163	131	80.36
III	N Kg	163	109	66.87
IV	Kg	192	132	68.75
IV	N Kg	192	121	63.02
V	Kg	158	91	57.50
V	N Kg	158	85	53.73
VI	Kg	211	136	64.45
VI	N Kg	211	133	63.03
Total	Kg	968	688	71.07
Total	N Kg	968	618	63.83

IV. RELATION OF KINDERGARTEN EXPERIENCE TO INTELLIGENCE

Right in the heart of the nature-nuture controversy one finds a substantial number of studies dealing with the effect of kindergarten attendance on intelligence quotient. Whether the experiences of kindergarten truly produce intellectual change or merely facilitate response and increase the subject's self-confidence is unresolved. However, with the exception of one or two studies (Anderson and Bird [11:31] both felt that children from superior homes did better than those from poor homes at the time of entrance and that this difference was maintained) research does indicate that significant changes can and are being made in I.Q. scores when the child has attended kindergarten.

Educational Psychology (16:510) reported a study by T. J. Peterson at the University of Iowa. He found the difference between the mean I.Q.'s of groups with and without preschool education to be 3.5 I.Q. points in favor of those who had attended preschool. By the end of the year, however, the difference had disappeared.

At the state University of Iowa Laboratory Preschools, B. L. Wellman (13:248) used the Binet testing program to show I.Q. changes between pupils with and without preschool experience. The average gain for all preschool children was 5.4

points. For those not attending preschool the gain was only 0.7 points. (The schools used in this study, however, were heavily staffed).

Hazel M. Lambert (11:30 refers to a study by Starkweather and Roberts relating to intelligence. She quotes them as saying that children attending nursery school "gain in I.Q. and percentile rank as measured by Stanford-Binet and Merrill-Palmer retests."

Woolfolk (24:264-268) reported an interesting investigation conducted by the Family Welfare Society in Atlanta, Georgia. The staff of the society had noticed an increase in mental retardation among the older children of families with whom they were working and also a tendency for the brighter children to deteriorate with age. The purpose of their study was to test the value of kindergarten in aiding the child to overcome the influence of an adverse environment. Seventy-five children were given the Stanford-Binet tests in preparation for admission to kindergarten; however, not all were able to go to kindergarten. At the end of the school year, all the children were tested again and a comparison of the results was made.

Kindergarten children, they found, made improvement in mental development during the year. The superior kindergarten children maintained their superior rating, while those who did not go received a much lower I.Q. score on the second

test. The children who made a significant gain in mental rating on the second test were children who had gone to kindergarten but could have been classified as mentally retarded the first time. After kindergarten, more than 50 per cent of the children who ranged in intelligence from normal but retarded to below seventy ranked average or superior; the remainder could be classified as normal but retarded. None had I.Q. scores below seventy. Thus, kindergarten attendance seemed to have some effect on mental growth.

A final study, by Wellman (22:127-138), compared preschool and non-preschool children, matched on initial I. Q., in relation to college entrance examination percentile and scores on intelligence test administered in high school. The results showed that preschool children made higher scores on these later measures than non-preschool children.

Even though the evidence presented here seems to indicate that kindergarten experience changes I.Q., it is impossible to reach any definite conclusions. One must keep in mind that (1) I.Q. tests are fallible and (2) early I.Q. tests are subject to wider fluctuations than those given to older children.

Another point to keep in mind is that the kindergarten was not designed to increase I.Q. scores. It may be that improved scores reflect a greater understanding of the language; most I.Q. tests given to kindergarteners are verbal (11:31).

Or it may be that an increase in maturity and poise contributed to a "halo" effect (13:249).

For these reasons, the true value of school education in this area cannot be measured by "before-and-after" scores on intelligence test only. As Munn points out (16:379):

> We may or may not be able to change the individual's capacity to learn (it may be purely innate or influenced by early learning), but we can certainly improve his opportunities to acquire those skills which are necessary for intelligent behavior.

The final section of this chapter, dealing with content areas, will perhaps be the most specific section of Chapter II. For this reason it was left until last. Two specific subject areas will be examined. The first, arithmetic, will be studied briefly; and the second, reading, will be looked at in more detail.

V. RELATION OF KINDERGARTEN EXPERIENCE TO ACHIEVEMENT IN CONTENT SUBJECTS

Kindergarten experience and success in arithmetic. Of all the achievement areas studied in this paper, arithmetic offered the least evidence relating kindergarten attendance and success in later elementary school. Yet even here the results were not negative. J. K. East, for example, tested first grade students in Blacksburg, South Carolina, with the Metropolitan Achievement Test and charted their scores according to pupils who attended and those who had not attended

kindergarten. In all areas the kindergarten pupils excelled as a group, but the margin was the smallest in the area of arithmetic (4:53).

Geotch (8:22), who reported similar findings, suggested that the reason kindergarten achievement in arithmetic is less is that it is less emphasized than language.

Risser and Elder (19:287) studied the relationship between arithmetic marks received by pupils enrolled in grades one through five and their relationship to kindergarten or non-kindergarten experience. Even though in grades three and four there was a slight advantage in favor of the non-kindergarten group (no explanation was given), on the over-all picture the kindergarten group excelled in grades one, two, and five, and by a significantly larger margin.

Another study was conducted by Sina Mott and Mary Martin (14:77-78) to see if first grade pupils retained number concepts learned in kindergarten. The following method was employed. Each child was tested individually at the end of the kindergarten year and again at the beginning of first grade. Materials used were fifteen small colored cubes. The child was asked to (1) count by rote, (2) count objects, (3) repeat a series of four numbers, (4) pick a designated number of cubes from the pile of fifteen, and (5) repeat a series of five numbers. The following results were obtained (15:77-78):

Rote Counting

	Kindergarten	First Grade
Beyond 10	96%	100%
Beyond 15	82%	93%
Beyond 20	50%	81%
Count to 100	22%	12%

Object Counting

	Kindergarten	First Grade
Beyond 10	93%	100%
Beyond 15	87%	93%
Beyond 20	81%	75%
Beyond 28	50%	68%

Repeating Numbers

	Kindergarten	First Grade
Repeating 4 numbers	82%	93%
Repeating 5 numbers	33%	37%

They concluded: "With the exception of counting by rote to one hundred, children carry over into first grade number experiences learned in kindergarten." The reason hypothesized for this one retarded area was that children had little use for rote counting.

Elizabeth Fuller, in What Research Says to the Teacher About the Kindergarten, concludes (5:14):

> . . . successful experiences with numbers in real situations in kindergarten tend to develop favorable attitudes toward the subject and to instill in children curiosities and interests in quantitative approaches. There is evidence that children retain number concepts learned in kindergarten for considerable periods of time and are able to apply them in theory and practice later.

Kindergarten experience and success in reading. Johnny can skip, run, play, communicate effectively; he has a good singing voice, enjoys listening to music, and has a good sense of rhythm. He is interested in rocks, flowers, grasshoppers, and trees. He can draw a man, paint a house, and make a turtle out of clay. But why can't Johnny read?

Regardless of the overwhelming research evidence demonstrating that biological growth must take place before the child can learn, some segments of our society expect children to learn to read in kindergarten. The child cannot control his growing. He has nothing to say about his biological make-up; his inherited growth patterns set the pace for him.

Fortunately more schools now are accepting these truths. Furthermore, they are reaching many parents with the facts--presented in simple, understandable language by such authorities as Gesell and Spock. We have come a long way towards accepting the fact of not forcing the child to do that which his growth will not let him do. In the long run this has proved to be the most efficient method of teaching, eliminating wasted work and re-teaching.

It is not always easy to remember this. Our society is continually stressing drive and competition, and we find it difficult to be content with yesterday's progress. Ambition lures us into wishing we could burst the bounds of biology.

In the kindergarten of all places we must avoid this temptation, especially in the area of reading. The American Educational Research Association of the National Education Association makes this clear by emphasizing that "research does not support the use of formalized reading in kindergarten" (5:13). Other authorities have reiterated this point, suggesting a readiness program to supplement the formal reading process.

The Baltimore School Curriculum Guide contends that ". . . teachers should not begin teaching of reading at the kindergarten level. . . ." (3:36). Hazel M. Lambert (11:310) maintains "the teacher should not rush the child into learning to read or write. . . ." And, Ruth Strickland (20:111) declares: ". . . The five year old child has not had enough experience to build the necessary background for such association. . . ." Willis and Stagman (23:200), authors and authorities in the field of kindergarten education, support the conclusions of the previously mentioned writers:

> . . . Many studies substantiate the fact that a child is seldom ready to learn to read until he has attained a mental age of six years six months. Probably, then, very few of the kindergarten enrolees would profit from instruction in reading should it be offered. The harm done those who have not matured sufficiently would far outweigh any value which might come to the few superior children. The majority would tend to develop a dislike rather than an enjoyment of reading; would probably fail rather than succeed.

Because reading is a complicated process involving more than just word recognition, most educators today feel that a sound reading readiness program is as important as the reading program itself. The process of comprehending symbols and associating meanings involves drawing on one's former experiences, but before one can do this he must have a good foundation in language.

> We need to realize that our schools are and will continue to be fundamentally language schools--to say nothing of the importance of effective language in life outside the school. The great bulk of instruction takes place through the medium of language. . . . It is imperative therefore, that the pupil understand adequately the meaning of the language which he reads and hears, and that he learns to say and write what he means clearly, exactly, and correctly. If a school's program in language fails, the bottom drops out of the school's entire offering (including social studies, science, and art) and the school becomes, as many schools have done, a monument to verbalism and loose thinking (14:145).

Having established the importance of language and reading (so inter-related they will be considered together) will perhaps justify the extra attention being given them in this paper.

A booklet compiled by four members of the Central Washington State College faculty entitled Reading Readiness suggests six areas which contribute to a successful reading readiness program (10:4):

1. Background of Experience
2. Developing Habits of Careful Thinking
3. Keeping a Series of Events in Mind
4. Developing Meaning Vocabulary
5. Making Desirable Growth in Speech
6. Experience with Literature

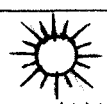
An enriched background is provided through a varied program of free play, planned and guided, which is more than recreation. Play provides an opportunity for the child to identify with the adult world, giving breadth to his experience. Simple experiences such as learning about the milkman, the fireman, and the policeman give the child time and opportunity to explore, to ask questions, to hear about, and to come in contact with the common materials encountered in the natural process of living.

Planned excursions supply him with first hand experiences relating to some of the topics he will cover in the first grade readers. The city boy having visited a farm in kindergarten will, for example, recall a mental image from his farm experience when one of the characters in his first grade reader talks about the big brown cow. Not only will

he visualize the brown image of a cow but he will also recall the smell of the cow and the feel of its curly hide.

Careful thinking and keeping a series of events in mind include development of such skills as seeing ideas in relation to one another and recognizing problems and working out solutions to them (even though they might not turn out as expected). During the kindergarten day dozens of little problems arise which challenge the child's thinking. Franchon Yeaker (10:23) suggests that "problems of individual conduct, room routine, and group management are rightfully the child's problems and he should participate in the working out of standards." Field trips, too, provide opportunities for groups to think through sequential learnings. As the group gains more experience with this type of thinking process, their work will improve in quality.

The daily newspaper, consisting partly of words and partly of drawn figures, is an excellent way to begin this type of work. Wills and Stegman (24:204), for example, suggest that the teacher might write with black crayon as the children dictate to her:

Today is 

Ann had a 

Mary brought some 

Bobby's  came to kindergarten.

Vocabulary and speech growth stemming from kindergarten experiences construct, word upon word, phrase upon phrase, a solid conceptual foundation in reading. Without this foundation success in reading is not likely.

The five year old with a speaking vocabulary of about two thousand words (11:63) is eager to experiment with language and to learn new words. Conversing with others during free play, planning experiences through group discussions, sharing experiences, telling about projects made in school, participating in drama experiences, all encourage language growth.

In the beginning the child's experiences with this reporting of events may be only a series of short answers to questions. For example (24:51):

Teacher: "Where did you go?"

Child: "Park."

Teacher: "What did you do?"

Child: "Played on the swings."

Teacher: "Then, what did you do?"

Child: "Went home."

As the child matures he begins telling short sequential stories without help from the teacher. Rather than wandering from the theme, he tells related ideas in sequence. Finally his fragmentary sentences become complete.

Guidance is an important factor in vocabulary growth; therefore, the teacher is an integral part of this development. A teacher does much to develop good speech habits in her group by speaking correctly, using a clear, pleasant voice, and appropriate and descriptive words.

The last instructional job is experience with literature. Since not all children can ride a train or visit the sea shore, their experiences are broadened vicariously by hearing the experiences of others written in well-expressed and imaginative ways. Besides broadening their backgrounds, books and poems help develop a keen interest in reading and a desire to read. Here, too, the teacher's attitude is important. So is the appearance of the room library. It should be filled with well-chosen books arranged in an attractive and inviting manner. Most of these books should be picture books; others may have simple one or two line texts accompanying the picture.

Research substantiates the belief that kindergarten reading readiness experiences contribute favorably to success in beginning reading regardless of the methods used to teach reading (5:13-14).

Pratt (18:525-523) carried out a study with 226 children in Erie County, Pennsylvania. Seventy-two had attended kindergarten, 128 had no previous schooling. Intelligence

levels were similar for kindergarten and non-kindergarten children. As measured by the Gates Primary Reading Readiness tests and the Gates Primary Reading Test, the kindergarten group were superior by 15.5 points, both in reading readiness and in reading achievement at the end of the first grade. He also found the kindergarten group to average 6.45 points higher than the non-kindergarten when measured in the American School Reading Test. Pratt concluded that (1) pupils with previous kindergarten experience had significant superiority over the non-kindergarten group in the reading readiness tests and (2) kindergarten children were far superior to non-kindergarteners in reading achievement. Pratt also felt this test pointed to a probable need of separate treatment for kindergarten and non-kindergarten children in the first grade.

Another study of first graders' success in reading was reported by Teegarden (21:82-85). School supervisors in eight cities in the area near Washington, D. C., tested the tendency to reverse and confuse letters during the first three weeks of first grade. Children with kindergarten experience showed less tendency to reverse and confuse letters and figures, attempted more items on reversal tests, and did more accurate work. This was true in every school studied.

Apparently the reading readiness experiences children receive in kindergarten have a carry-over effect even beyond

first and second grades. Risser and Elder (19:286-289) found that 130 Township, Indiana, children who had kindergarten experience were superior in reading ability to 163 children without such experience. They reported (1) success in reading in each of the first five elementary grades was closely related to kindergarten training and (2) kindergarten attendance increased the child's chances for success in all efforts requiring ability to read well.

Similar results were found by Goetch (8:20-22), who appraised the reading progress of 1,936 public school children, half of whom attended kindergarten. He found the grade means of the reading scores significantly higher in all grades for the children with kindergarten experience. The greatest difference was found in grades three and four. Goetch concluded: "In those grades mechanics of reading are more strongly emphasized than in other grades and since the basis for the mechanics of reading is found in kindergarten, it would seem reasonable to accredit kindergarten training with this superiority attained" (8:22).

Readiness programs in the kindergarten constitute one of the most important contributions to the child's training in reading. For this reason, instruction must not be haphazard, but well planned.

Six instructional tasks were outlined in the foregoing pages. If properly carried, these would provide a

balanced program and a good background in reading. All kindergarten teachers should consider it their duty to discover as much as they can about these skills, then incorporate them in the kindergarten program.

CHAPTER III

SUMMARY AND CONCLUSIONS

I. SUMMARY

The following findings were revealed by this study:

1. Social ratings received by kindergarten-trained pupils were superior to those given to non-kindergarteners.
2. Kindergarten-trained students received more regular promotions, and fewer failures than non-kindergarteners.
3. The comparisons of I.Q.'s implied that training received at kindergarten raised the ability of these children as measured by intelligence tests. The non-kindergarten children with undirected experiences did not perform as well on the same tests.
4. Although evidence of kindergarten superiority in arithmetic was not conclusive, most reports showed that attitudes and concepts learned in kindergarten had a carry-over effect in the first grade.
5. There was continuous evidence of kindergarteners superiority in reading as measured by standardized reading tests.

II. CONCLUSIONS

The importance of the first five years of life has long been recognized. It lays the foundations of mental, emotional, and physical health and forms the bases for social adjustment. For this reason the kindergarten and the family, to refer to the beginning analogy, have important responsibilities in seeing that all children receive equal opportunities for maximum growth.

Research cited in this paper reveals abundant support of the values of kindergarten training. But one must constantly keep in mind the gaps in knowledge of how to measure what one wants to know and the confusion existing as to what value systems are to be employed when the evaluations are made.

Attitudes and appreciations kindergarten teachers aspire to achieve cannot be defined by group study methods. Perhaps the full values of kindergarten training can never be statistically revealed.

What one can say after a review of the literature is that given a normal, ready child, an alert teacher, and proper facilities, the kindergarten-trained child will find first grade a natural and comfortable extension of his earlier experiences.

The kindergarten year should no longer be considered a detached and isolated unit given to only a few privileged

children. It should be considered in its true importance and relationship to the rest of the elementary school.

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